WHAT IS CLAIMED IS:

1. A charge pump circuit comprising:

a first transistor;

a first capacitor coupled to the first transistor;

a second transistor coupled to the first transistor; and

a second capacitor coupled to the second transistor, wherein the second transistor has a lower threshold voltage than the first transistor at a common source voltage

2. The charge pump circuit of claim 1 further comprising:

a third transistor coupled to the second transistor; and

a third capacitor coupled to the third transistor, wherein the third transistor has a lower threshold voltage than the first transistor at a common source voltage.

3. The charge pump circuit of claim 2 further comprising:

a fourth transistor coupled to the third transistor; and

a fourth capacitor coupled to the fourth transistor, wherein the fourth transistor has a lower threshold voltage than the first transistor at a common source voltage.

4. The charge pump circuit of claim 3 further comprising:

a fifth transistor coupled to the fourth transistor; and

a fifth capacitor coupled to the fifth transistor, wherein the fifth transistor has a lower threshold voltage than the first transistor at a common source voltage.

5. The charge pump circuit of claim 3 further comprising four diode-connected transistors, wherein each diode-connection transistor is coupled to a gate of one of the first, second, third, and fourth transistors.

6. The charge pump circuit of claim 4 further comprising:

a sixth transistor coupled to the fifth transistor;

a sixth capacitor coupled to the sixth transistor;

a seventh transistor coupled to the sixth transistor;

a seventh capacitor coupled to the seventh transistor;

an eighth transistor coupled to the seventh transistor; and

an eighth capacitor coupled to the eighth transistor, wherein the sixth, seventh, and eighth transistors each have a lower threshold voltages than the first transistor at a common source voltage.

7. The charge pump circuit of claim 6 further comprising:

a ninth transistor coupled to the eighth transistor;

a ninth capacitor coupled to the ninth transistor;

a tenth transistor coupled to the ninth transistor;

a tenth capacitor coupled to the tenth transistor;

an eleventh transistor coupled to the tenth transistor; and

an eleventh capacitor coupled to the eleventh transistor, wherein the ninth, tenth, and eleventh transistors each have a lower threshold voltages than the first transistor at a common source voltage.

8. The charge pump circuit of claim 7 further comprising:

a twelfth transistor coupled to the eleventh transistor;

a twelfth capacitor coupled to the twelfth transistor;

a thirteenth transistor coupled to the twelfth transistor;

a thirteenth capacitor coupled to the thirteenth transistor, wherein the twelfth and thirteenth transistors each have a lower threshold voltages than the first transistor at a common source voltage.

9. The charge pump circuit of claim 8 further comprising:

a fourteenth transistor coupled to the thirteenth transistor;

a fourteenth capacitor coupled to the fourteenth transistor;

a fifteenth transistor coupled to the fourteenth transistor; and

an fifteenth capacitor coupled to the fifteenth transistor, wherein the fourteenth and fifteenth transistors each have a lower threshold voltages than the first transistor at a common source voltage.

10. The charge pump circuit of claim 3 wherein the first and third capacitors are coupled to receive a first clock signal, and the second and fourth capacitors are coupled to receive a second clock signal.

11. The charge pump circuit of claim 10 further comprising:

a fifth capacitor coupled to the first transistor and a third clock signal;

a sixth capacitor coupled to the second transistor and a fourth clock signal;

a seventh capacitor coupled to the third transistor and the third clock signal; and

an eighth capacitor coupled to the fourth transistor and the fourth clock signal.

12. A method for receiving an input voltage and providing a boosted output voltage, the method comprising:

increasing a first voltage at a first capacitor;

coupling the first capacitor to a second capacitor through a first transistor;

increasing a second voltage at the second capacitor; and

coupling the second capacitor to a third capacitor through a second depletion transistor.

13. The method of claim 12 further comprising:

increasing a third voltage at the third capacitor;

coupling the third capacitor to a fourth capacitor through a third depletion transistor;

increasing a fourth voltage at the fourth capacitor; and

coupling the fourth capacitor to a fifth capacitor through a fourth deletion transistor.

14. The method of claim 13 further comprising:

increasing a fifth voltage at the fifth capacitor;

coupling the fifth capacitor to a sixth capacitor through a fifth depletion transistor;

increasing a sixth voltage at the sixth capacitor; and

coupling the sixth capacitor to a seventh capacitor through a sixth depletion transistor.

15. The method of claim 14 further comprising:

increasing a seventh voltage at the seventh capacitor;

coupling the seventh capacitor to a eighth capacitor through a seventh depletion transistor;

increasing an eighth voltage at the eighth capacitor; and

coupling the eighth capacitor to a ninth capacitor througl a eighth depletion transistor.

16. The method of claim 15 further comprising:

increasing a ninth voltage at the ninth capacitor;

coupling the ninth capacitor to a tenth capacitor through a ninth depletion transistor;

increasing a tenth voltage at the tenth capacitor; and

coupling the tenth capacitor to an eleventh capacitor through a tenth depletion transistor.

17. The method of claim 16 further comprising:

increasing an eleventh voltage at the eleventh capacitor;

coupling the eleventh capacitor to a twelfth capacitor through an eleventh depletion transistor;

increasing a twelfth voltage at the twelfth capacitor; and

coupling the twelfth capacitor to a thirteenth capacitor through a twelfth depletion transistor.

18. The method of claim 14 wherein the first transistor has a greater threshold voltage than the second, third, fourth, fifth and sixth transistors at a common source voltage.

19. The method of claim 13 further comprising:

providing a first clock signal to the first and third capacitors; and

providing a second clock signal to the second and the fourth capacitors.

20. The method of claim 19 further comprising:

coupling a gate and a drain/source of the first transistor through a fifth transistor in response to the first clock signal;

providing a third clock signal to fifth and sixth capacitors coupled to gates of the first and third transistors;

coupling a gate and a drain/source of the second transistor through a sixth transistor in response to the second clock signal;

providing a fourth clock signals to sixth and seventh capacitors coupled to gates of the second and fourth transistors; and

coupling a gate and a drain/source of the third transistor through a seventh transistor in response to the first clock signal.

21. A charge pump circuit comprising:

a first stage comprising a first depletion field-effect transistor;

a second stage comprising a second depletion field-effect transistor, the second stage being coupled to the first stage;

a first capacitor coupled to the first stage; and

a second capacitor coupled to the second stage.

22. The charge pump circuit of claim 21 further comprising:

a third stage comprising a third depletion field-effect transistor, the third stage being coupled to the second stage;

a fourth stage comprising a fourth depletion field-effect transistor, the fourth stage being coupled to the third stage;

a third capacitor coupled to the third stage; and

a fourth capacitor coupled to the fourth stage.

23. The charge pump circuit of claim 22 further comprising:

a fifth stage comprising a fifth depletion field-effect transistor, the fifth stage being coupled to the fourth stage;

a sixth stage comprising a sixth depletion field-effect transistor, the sixth stage being coupled to the fourth stage;

a fifth capacitor coupled to the fifth stage; and

a sixth capacitor coupled to the sixth stage.

24. The charge pump circuit of claim 23 further comprising:

a seventh stage comprising a seventh depletion field-effect transistor, the seventh stage being coupled to the sixth stage;

an eighth stage comprising an eighth depletion field-effect transistor, the eighth stage being coupled to the seventh stage;

a seventh capacitor coupled to the seventh stage; and

an eighth capacitor coupled to the eighth stage.

25. The charge pump circuit of claim 24 further comprising:

a ninth stage comprising a ninth field-effect transistor, the ninth stage being coupled to the eighth stage;

a tenth stage comprising a tenth depletion field-effect transistor, the tenth stage being coupled to the ninth stage;

an eleventh stage comprising an eleventh field-effect transistor, the eleventh stage being coupled to the tenth stage;

a ninth capacitor coupled to the ninth stage;

a tenth capacitor coupled to the tenth stage; and

an eleventh capacitor coupled to the eleventh stage.

26. The charge pump circuit of claim 22 wherein the first and third capacitors are coupled to receive a first clock signal, and the second and fourth capacitors are coupled to receive a second clock signal.

27. The charge pump circuit of claim 26 further comprising:

a fifth capacitor coupled to a gate of the first depletion transistor;

a sixth capacitor coupled to a gate of the second depletion transistor;

a seventh capacitor coupled to a gate of the third depletion transistor; and

an eighth capacitor coupled to a gate of the fourth depletion transistor, wherein the fifth and seventh capacitors are coupled to receive a third clock signal, and the sixth and eighth transistors are coupled to receive a fourth clock signal.

28. The charge pump circuit of claim 27 further comprising:

a fifth transistor coupled across two terminals of the first transistor and to the first capacitor;

a sixth transistor coupled across two terminals of the second transistor and to the second capacitor;

a seventh transistor coupled across two terminals of the third transistor and to the third capacitor; and

an eighth transistor coupled across two terminals of the fourth transistor and to the fourth capacitor.

29. An integrated circuit comprising:

programmable logic circuitry; and

a charge pump circuit comprising:

first and second stages coupled together,

a first capacitor coupled to the first stage, and

a second capacitor coupled to the second stage, wherein the second stage comprising a depletion transistor.